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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/804,975	03/13/2001	Heinz Mueller	7040-24	9365

7590 06/13/2002

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EXAMINER

STEWART, ALVIN J

ART UNIT

PAPER NUMBER

3738

DATE MAILED: 06/13/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/804,975

Applicant(s)

MUELLER ET AL.

Examiner

Alvin J Stewart

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-58 is/are pending in the application.
- 4a) Of the above claim(s) 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Claim 10 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 8.

Applicant's election without traverse of Species D in Paper No. 8 is acknowledged.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 1-9 and 11-58 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Serruys, Handbook of Coronary Stents".

Serruys discloses in Fig. 13.1 a stent having a plurality of tubular portions (see the different columns (1, 2, 3), shaded by the Examiner, see attachment) having a plurality of cell-shaped elements (see close structure made by struts) and connected by at least one first connecting means (see the different connecting means (a, b, c) disclosed by the Examiner, see attachment). The cell-shaped elements of each portion are connected together in the longitudinal

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direction by the connecting means (they have two means for connecting adjacent tubular portions, see the articulation length in Fig. 13.1) and define an edge contour that extends around the stent in a wave-like configuration. The two edge contours of one of the tubular portions extend substantially in in-phase relationship. Additionally, the first connecting means connect elements together in the same orientation (see column (1, 2, 3); they have a bar-like configuration and extends substantially parallel to the longitudinal axis of the stent (most of the struts of each element have a straight configuration). Finally, the edge contours of the two tubular portions engage into each other in the manner of a tooth configuration and each element is connected to another element in the peripheral direction by second connecting means.

Claims 1-6, 8, 11-29, 46, 47 and 53 are rejected under 35 U.S.C. 102(e) as being anticipated by Dang US Patent 5,935,162.

Dang discloses a stent having at least two tubular portions (one portion is elements 20a & 20b and the second portion is elements 20c & 20d) having a plurality of cell-shaped elements (see front of patent shaded area) and connected by at least one first connecting means. The elements define an edge contour extending around the stent in a wave-like configuration, wherein the mutually adjoining edge contours of the at least two tubular portions extend around the stent substantially in an in-phase relationship (see the front page of patent 5,935,162 disclosing a one first end (20a) of the first tubular portion having an in-phase relationship with the first end (20c) of the second tubular portion). The claims disclosed above are given their broadest reasonable interpretation. In re Pearson, 181 USPQ 641 (CCPA 1974).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 30-45 and 48-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dang US Patent 5,935,162 in view of Wolff US Patent 5,104,404.

Dang discloses the invention substantially as claimed. However, Dang does not disclose more than two first connecting means for connecting adjacent tubular portions.

Wolff teaches a stent having only one connecting means for the purpose of adding flexibility to the stent in the radial direction (see Fig. 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use no more than two first connecting means for connecting adjacent tubular portions for the purpose of reducing the bending stiffness of the stent (as shown by the Wolff reference).

Response to Arguments

Applicant's arguments filed September 05, 2002 have been fully considered but they are not persuasive.

Regarding claim 1, Dang discloses all the structural limitations claimed by the Applicant. The Examiner traverses the Applicant remarks. The Examiner believes that the Applicant has misunderstood the interpretation of the claims. The Examiner understands the in-phase relationship between the mutually adjoining edge contours. However, as shown by exhibit 1, the

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Applicant did not understand the Examiner's interpretation of the claims, especially claims 1 and 58. As disclosed above (in the rejections), the Examiner has interpreted the at least two tubular portions (one portion is element (20a) connected to element (20b) and the second portion is element (20c) connected to element (20d)) having a plurality of cell-shaped elements (see attachment) and connected by at least one first connecting means. The elements define an edge contour extending around the stent in a wave-like configuration, wherein the mutually adjoining edge contours of the at least two tubular portions extend around the stent substantially in an in-phase relationship (see attachment, Fig. 2; the first end (20a) of the first tubular portion (combination of elements 20a & 20b) having an in-phase relationship with the first end (20c) of the second tubular portion (combination of elements 20c & 20d)). In order to overcome this rejection the Applicant should enter the limitations describing the in-phase relationship between the two edge contours of one tubular portion and adding limitations to the first connecting means.

Regarding the Serruys reference the Examiner believe that the rejection is now clear.

Regarding the 35 USC 103 rejection, the Examiner add the Wolff reference only to show that it is well known in the art the use of only one first connecting means for the purpose of adding flexibility to the stent in the radial direction.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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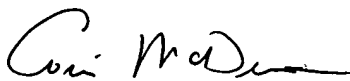
MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin J Stewart whose telephone number is 703-305-0277. The examiner can normally be reached on Monday-Friday 7:00AM-5:30PM(1 Friday B-week off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on 703-308-2111. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3590 for regular communications and 703-308-2708 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.

AS
AST
November 5, 2002


CORRINE McDERMOTT
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700

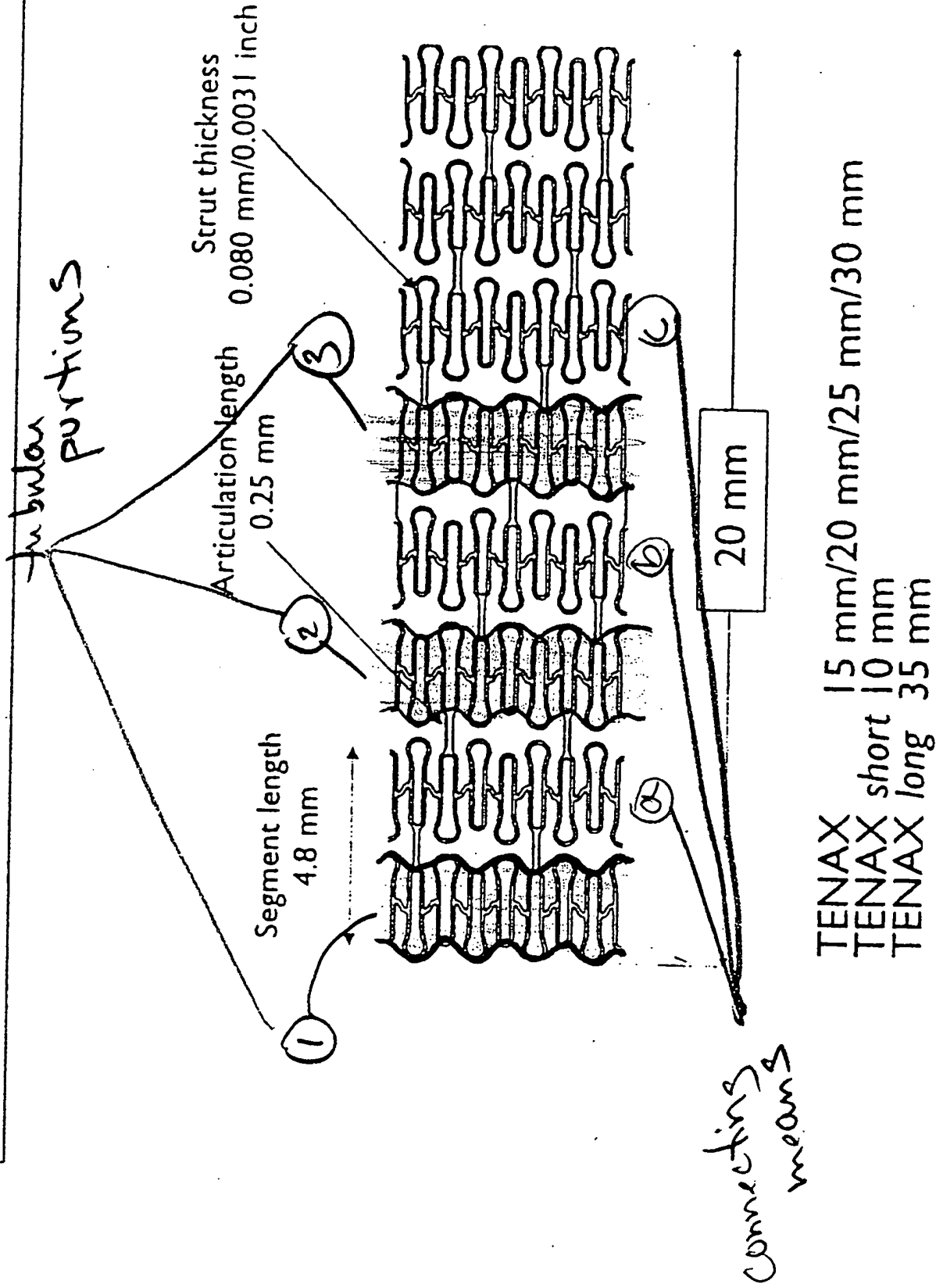


Figure 13.1: Technical drawing of TENAX coronary stent with optimized geometry.

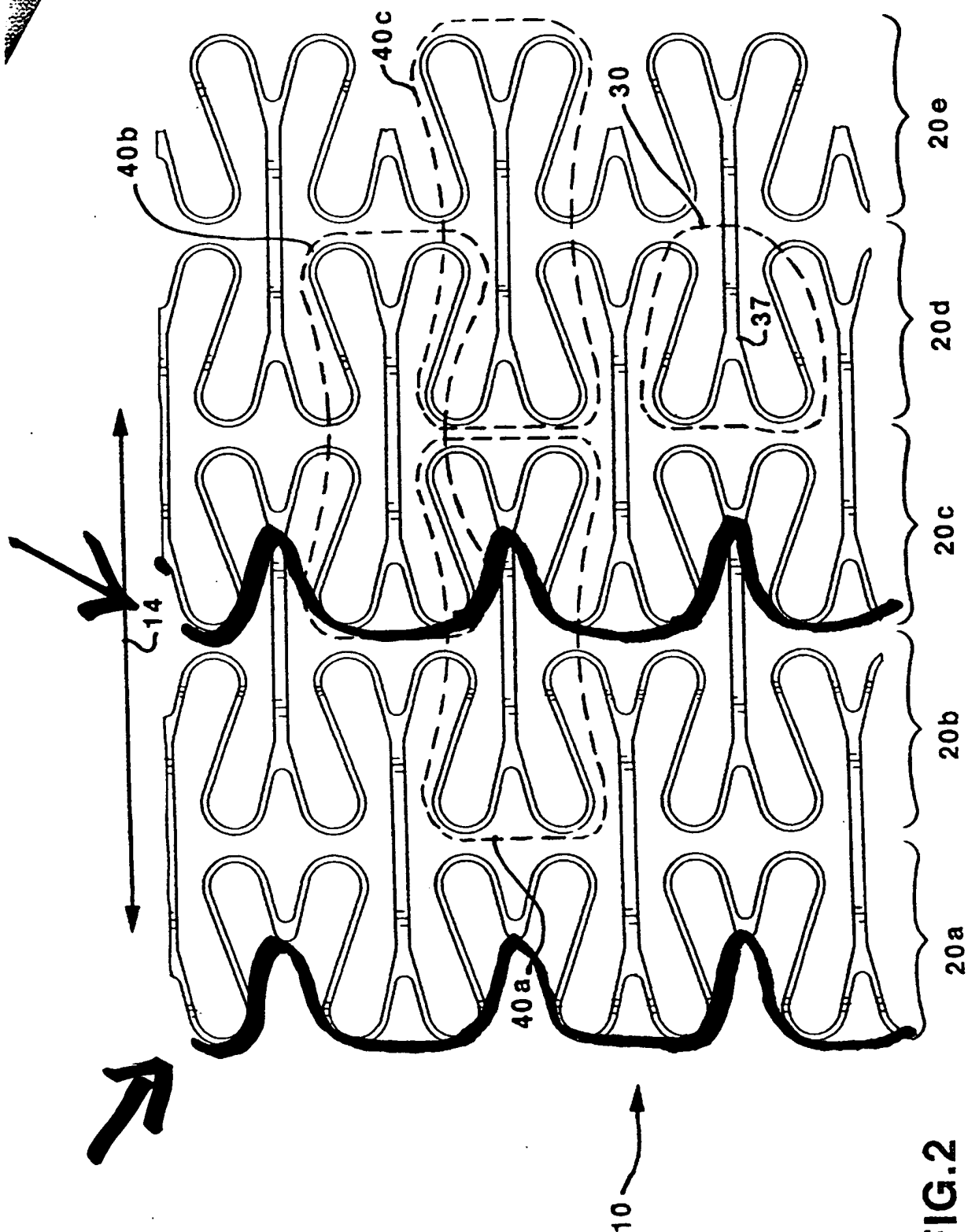


FIG. 2